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     (FILE 'HOME' ENTERED AT 07:59:05 ON 31 JUL 2006)

     FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, JAPIO' ENTERED AT 07:59:21 ON 31
     JUL 2006
L1             6 S (48 DIFFERENT ANTIBOD?)
L2             2 S L1 AND ARRAY?
L3             0 S L1 AND PD<2000
L4           429 S (ANTIBOD? MICROARRAY)
L5             3 S L4 AND PD<2000
L6           214 DUPLICATE REMOVE L4 (215 DUPLICATES REMOVED)
L7            35 S L6 AND REVIEW?

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     (FILE 'HOME' ENTERED AT 07:59:05 ON 31 JUL 2006)

     FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, JAPIO' ENTERED AT 07:59:21 ON 31
     JUL 2006
L1             6 S (48 DIFFERENT ANTIBOD?)
L2             2 S L1 AND ARRAY?
L3             0 S L1 AND PD<2000
L4           429 S (ANTIBOD? MICROARRAY)
L5             3 S L4 AND PD<2000
L6           214 DUPLICATE REMOVE L4 (215 DUPLICATES REMOVED)
L7            35 S L6 AND REVIEW?

=>
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(FILE 'HOME' ENTERED AT 07:59:05 ON 31 JUL 2006)

FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, JAPIO' ENTERED AT 07:59:21 ON 31 JUL 2006

L1	6	S	(48 DIFFERENT ANTIBOD?)
L2	2	S	L1 AND ARRAY?
L3	0	S	L1 AND PD<2000
L4	429	S	(ANTIBOD? MICROARRAY)
L5	3	S	L4 AND PD<2000

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(FILE 'HOME' ENTERED AT 07:59:05 ON 31 JUL 2006)

FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, JAPIO' ENTERED AT 07:59:21 ON 31 JUL 2006

L1	6	S	(48 DIFFERENT ANTIBOD?)
L2	2	S	L1 AND ARRAY?
L3	0	S	L1 AND PD<2000
L4	429	S	(ANTIBOD? MICROARRAY)
L5	3	S	L4 AND PD<2000

=>

ANSWER 18 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:951644 CAPLUS
DN 142:293875
ED Entered STN: 10 Nov 2004
TI High-throughput proteomics using antibody microarrays
AU Wingren, Christer; Borrebaeck, Carl A. K.
CS Department of Immunotechnology, Lund University, Lund, Swed.
SO Expert Review of Proteomics (2004), 1(3), 355-364
CODEN: ERPXA3; ISSN: 1478-9450
PB Future Drugs Ltd.
DT Journal; General Review
LA English
CC 9-0 (Biochemical Methods)
Section cross-reference(s): 1, 14
AB A review. Antibody-based microarrays are a novel technol. that hold great promise in proteomics. Microarrays can be printed with thousands of recombinant antibodies carrying the desired specificities, the biol. sample (e.g., an entire proteome) and any specifically bound analytes detected. The microarray patterns that are generated can then be converted into proteomic maps, or mol. fingerprints, revealing the composition of the proteome. Using this tool, global proteome anal. and protein expression profiling will thus provide new opportunities for biomarker discovery, drug target identification and disease diagnostics, as well as providing insights into disease biol. Intense work is currently underway to develop this novel technol. platform into the high-throughput proteomic tool required by the research community.
ST review high throughput proteomic antibody microarray
IT Protein expression profiles
Protein microarray technology
Proteomics
(high-throughput proteomics using antibody microarrays)
IT Proteome
RL: ANT (Analyte); ANST (Analytical study)
(high-throughput proteomics using antibody microarrays)
IT Antibodies and Immunoglobulins
RL: ARG (Analytical reagent use); DEV (Device component use); ANST (Analytical study); USES (Uses)
(high-throughput proteomics using antibody microarrays)
RE.CNT 88 THERE ARE 88 CITED REFERENCES AVAILABLE FOR THIS RECORD
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ANSWER 2 OF 35 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
AN 2005:219591 BIOSIS
DN PREV200510003108
TI Progress in protein and antibody microarray technology.
AU Angenendt, Philipp [Reprint Author]
CS German Canc Res Ctr, Funct Genome Anal, Neuenheimer Feld 580, D-69120 Heidelberg, Germany
p.angenendt@dkfz-heidelberg.de
SO Drug Discovery Today, (APR 1 2005) Vol. 10, No. 7, pp. 503-511.
ISSN: 1359-6446.
DT Article
General Review; (Literature Review)
LA English
ED Entered STN: 10 Jun 2005
Last Updated on STN: 10 Jun 2005
AB The success of genome sequencing projects has led to a shift from the description of single molecules to the characterisation of complex samples. At the same time, there is growing interest not only in studying organisms at the genomic level, but in the characterization of their proteome. Such a task would not be possible without the availability of appropriate technologies. Protein and antibody microarray technologies are, in addition to two-dimensional gel electrophoresis followed by mass spectrometry, two of the most propitious technologies for the screening of complex protein samples. Nevertheless, to succeed, protein and antibody microarrays have to overcome their current limitations. This review aims to introduce these new technologies and highlights their current prospects and limitations.
CC Genetics - General 03502
Genetics - Population genetics 03509
IT Major Concepts
Methods and Techniques; Population Genetics (Population Studies); Molecular Genetics (Biochemistry and Molecular Biophysics)
IT Methods & Equipment
mass spectrometry: laboratory techniques, spectrum analysis techniques; two-dimensional gel electrophoresis: electrophoretic techniques, laboratory techniques; genome sequencing: laboratory techniques, genetic techniques; antibody microarray: laboratory techniques; protein microarray: laboratory techniques

ANSWER 3 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1997:101881 CAPLUS
DN 126:209077
ED Entered STN: 13 Feb 1997
TI Microarray-based immunoassays
AU Chu, F. W.; Edwards, P. R.; Ekins, R. P.; Berger, H.; Finckh, P.; Krause, F.
CS Div. Mol. Endocrinology, Univ. College London Medical School, London, W1N 8AA, UK
SO ACS Symposium Series (1997), 657(Immunochemical Technology for Environmental Applications), 170-184
CODEN: ACSMC8; ISSN: 0097-6156
PB American Chemical Society
DT Journal; General Review
LA English
CC 9-0 (Biochemical Methods)
Section cross-reference(s): 3, 4
AB A review with 19 refs. about the general principles underlying the emerging technol. of microarray-based immunoassays. Recent worldwide interest in the development of miniaturized, array-based, multianalyte binding assay methods suggests that the ligand assay field is on the brink of a technol. revolution. Our own collaborative studies in this area have centered largely (but not exclusively) on antibody spot "immunoarrays" localized on "microchips" which are potentially capable of determining the amts. of hundreds of different analytes in a small sample (such as a single drop of blood). Analogous technol. for genetic testing using oligonucleotide arrays is under active development both in the US and Europe. Array-based immunoassay methods are clearly likely to prove of particular importance in areas such as environmental monitoring where the concns. of many different analytes in test samples are required to be simultaneously determined
ST review microarray based immunoassay antibody
IT Immunoassay
(apparatus; microarray-based immunoassays)
IT Blood analysis
Immunoassay
(microarray-based immunoassays)
IT Antibodies
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(microarray-based immunoassays)

ANSWER 1 OF 3 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
AN 1999:301008 BIOSIS
DN PREV199900301008
TI Immunoassay and other ligand assays: From isotopes to luminescence.
AU Ekins, Roger [Reprint author]
CS Department of Molecular Endocrinology, University College London Medical School, Mortimer Street, London, W1N 8AA, UK
SO Journal of Clinical Ligand Assay, (Spring, 1999) Vol. 22, No. 1, pp. 61-77. print.
ISSN: 1081-1672.
DT Article
General Review; (Literature Review)
LA English
ED Entered STN: 12 Aug 1999
Last Updated on STN: 12 Aug 1999
AB This article reviews key developments in the ligand assay field. These methods are represented by three generations: 1) competitive assays which rely on radio-labeled analyte markers to reveal the products of the reaction between the analyte and a specific binding agent; 2) non-competitive ultra-sensitive assays in which the binding agent is labeled with a non-isotopic marker of much higher specific activity than radioisotopes; and 3) microarray technologies which permit simultaneous ultra-sensitive measurement of tens, hundreds, or thousands of analytes in a sample. The importance of ligand assays stems largely from their high sensitivity. However, developments in the field have been profoundly affected by misunderstanding the concept of sensitivity itself. This has obscured the significance of major innovations such as in vitro methods of (monoclonal) antibody production and the microspot assay techniques that underlie microarray-based methods. These may revolutionize in vitro diagnostics in the next decade.
CC Biochemistry methods - General 10050
General biology - Information, documentation, retrieval and computer applications 00530
Biochemistry studies - General 10060
Immunology - General and methods 34502
IT Major Concepts
Computer Applications (Computational Biology); Immune System (Chemical Coordination and Homeostasis); Methods and Techniques
IT Methods & Equipment
antibody microarray: immunologic method; immunoassay automation: computer method, immunologic method; ligand assay: analytical method; microanalytical chips: computer system; ultra-sensitive multianalyte assay: analytical method; DNA analysis: analytical method
IT Miscellaneous Descriptors
luminescence

ANSWER 1 OF 3 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
AN 1999:301008 BIOSIS
DN PREV199900301008
TI Immunoassay and other ligand assays: From isotopes to luminescence.
AU Ekins, Roger [Reprint author]
CS Department of Molecular Endocrinology, University College London Medical School, Mortimer Street, London, W1N 8AA, UK
SO Journal of Clinical Ligand Assay, (Spring, 1999) Vol. 22, No. 1, pp. 61-77. print.
ISSN: 1081-1672.
DT Article
General Review; (Literature Review)
LA English
ED Entered STN: 12 Aug 1999
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CC Biochemistry methods - General 10050
General biology - Information, documentation, retrieval and computer applications 00530
Biochemistry studies - General 10060
Immunology - General and methods 34502
IT Major Concepts
Computer Applications (Computational Biology); Immune System (Chemical Coordination and Homeostasis); Methods and Techniques
IT Methods & Equipment
antibody microarray: immunologic method; immunoassay automation: computer method, immunologic method; ligand assay: analytical method; microanalytical chips: computer system; ultra-sensitive multianalyte assay: analytical method; DNA analysis: analytical method
IT Miscellaneous Descriptors
luminescence

ANSWER 3 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1997:101881 CAPLUS
DN 126:209077
ED Entered STN: 13 Feb 1997
TI Microarray-based immunoassays
AU Chu, F. W.; Edwards, P. R.; Ekins, R. P.; Berger, H.; Finckh, P.; Krause, F.
CS Div. Mol. Endocrinology, Univ. College London Medical School, London, W1N 8AA, UK
SO ACS Symposium Series (1997), 657(Immunochemical Technology for Environmental Applications), 170-184
CODEN: ACSMC8; ISSN: 0097-6156
PB American Chemical Society
DT Journal; General Review
LA English
CC 9-0 (Biochemical Methods)
Section cross-reference(s): 3, 4
AB A review with 19 refs. about the general principles underlying the emerging technol. of microarray-based immunoassays. Recent worldwide interest in the development of miniaturized, array-based, multianalyte binding assay methods suggests that the ligand assay field is on the brink of a technol. revolution. Our own collaborative studies in this area have centered largely (but not exclusively) on antibody spot "immunoarrays" localized on "microchips" which are potentially capable of determining the amts. of hundreds of different analytes in a small sample (such as a single drop of blood). Analogous technol. for genetic testing using oligonucleotide arrays is under active development both in the US and Europe. Array-based immunoassay methods are clearly likely to prove of particular importance in areas such as environmental monitoring where the concns. of many different analytes in test samples are required to be simultaneously determined
ST review microarray based immunoassay antibody
IT Immunoassay
(apparatus; microarray-based immunoassays)
IT Blood analysis
Immunoassay
(microarray-based immunoassays)
IT Antibodies
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(microarray-based immunoassays)

ANSWER 31 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2001:182232 CAPLUS
DN 135:32439
ED Entered STN: 16 Mar 2001
TI Protein and antibody arrays and their medical applications
AU Cahill, D. J.
CS Max-Planck-Institute of Molecular Genetics, Berlin, D-14195, Germany
SO Journal of Immunological Methods (2001), 250(1-2), 81-91
CODEN: JIMMBG; ISSN: 0022-1759
PB Elsevier Science B.V.
DT Journal; General Review
LA English
CC 15-0 (Immunochemistry)
Section cross-reference(s): 9, 14
AB A review with 30 refs. Many new gene products are being discovered by large-scale genomics and proteomics strategies, the challenge is now to develop high throughput approaches to systematically analyze these proteins and to assign a biol. function to them. Having access to these gene products as recombinantly expressed proteins, would allow them to be robotically arrayed to generate protein chips. Other applications include using these proteins for the generation of specific antibodies, which can also be arrayed to produce antibody chips. The availability of such protein and antibody arrays would facilitate the simultaneous anal. of thousands of interactions within a single experiment This chapter will focus on current strategies used to generate protein and antibody arrays and their current applications in biol. research, medicine and diagnostics. The shortcomings of these approaches, the developments required, as well as the potential applications of protein and antibody arrays will be discussed.
ST review protein antibody microarray diagnosis
IT Antibodies
RL: ANT (Analyte); ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(protein and antibody arrays and their medical applications)
IT Proteins, general, biological studies
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(protein and antibody arrays and their medical applications)
IT Diagnosis
(protein and antibody arrays in)
RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Anderson, L; Electrophoresis 1997, V18, P533 CAPLUS
(2) Bussow, K; Nucleic Acids Res 1998, V26, P5007 CAPLUS
(3) Cahill, D; Proteomics From Protein Sequence To Function 2000, P1
(4) Cohen, C; Anal Biochem 1999, V273, P89 CAPLUS
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(6) Ekins, R; Clin Chem 1998, V44, P2015 CAPLUS
(7) Emili, A; Nat Biotechnol 2000, V18, P393 CAPLUS
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(19) MacBeath, G; Science 2000, V289, P1760 CAPLUS
(20) Masters, C; Br Med J 1998, V316, P446 MEDLINE
(21) Mendoza, L; Biotechniques 1999, V27, P778 CAPLUS
(22) Merchant, M; Electrophoresis 2000, V21, P1164 CAPLUS

(23) Michael, K; Anal Chem 1998, V70, P1242 CAPLUS
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(29) Uetz, P; Nature 2000, V403, P623 CAPLUS
(30) Walter, G; Curr Opin Microbiol 2000, V3, P298 CAPLUS

ANSWER 31 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2001:182232 CAPLUS
DN 135:32439
ED Entered STN: 16 Mar 2001
TI Protein and antibody arrays and their medical applications
AU Cahill, D. J.
CS Max-Planck-Institute of Molecular Genetics, Berlin, D-14195, Germany
SO Journal of Immunological Methods (2001), 250(1-2), 81-91
CODEN: JIMMBG; ISSN: 0022-1759
PB Elsevier Science B.V.
DT Journal; General Review
LA English
CC 15-0 (Immunochemistry)
Section cross-reference(s): 9, 14
AB A review with 30 refs. Many new gene products are being discovered by large-scale genomics and proteomics strategies, the challenge is now to develop high throughput approaches to systematically analyze these proteins and to assign a biol. function to them. Having access to these gene products as recombinantly expressed proteins, would allow them to be robotically arrayed to generate protein chips. Other applications include using these proteins for the generation of specific antibodies, which can also be arrayed to produce antibody chips. The availability of such protein and antibody arrays would facilitate the simultaneous anal. of thousands of interactions within a single experiment This chapter will focus on current strategies used to generate protein and antibody arrays and their current applications in biol. research, medicine and diagnostics. The shortcomings of these approaches, the developments required, as well as the potential applications of protein and antibody arrays will be discussed.
ST review protein antibody microarray diagnosis
IT Antibodies
RL: ANT (Analyte); ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(protein and antibody arrays and their medical applications)
IT Proteins, general, biological studies
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(protein and antibody arrays and their medical applications)
IT Diagnosis
(protein and antibody arrays in)
RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Anderson, L; Electrophoresis 1997, V18, P533 CAPLUS
(2) Bussow, K; Nucleic Acids Res 1998, V26, P5007 CAPLUS
(3) Cahill, D; Proteomics From Protein Sequence To Function 2000, P1
(4) Cohen, C; Anal Biochem 1999, V273, P89 CAPLUS
(5) de Wildt, R; Nat Biotechnol 2000, V18, P989 CAPLUS
(6) Ekins, R; Clin Chem 1998, V44, P2015 CAPLUS
(7) Emili, A; Nat Biotechnol 2000, V18, P393 CAPLUS
(8) Engelbert, C; Cancer Res 2000, V60, P1526
(9) Ge, H; Nucleic Acids Res 2000, V28, Pe3 CAPLUS
(10) Herwig, R; Genome Res 1999, V9, P1093 CAPLUS
(11) Holt, L; Nucleic Acids Res 2000, V28(1-5), Pe72
(12) Humphery-Smith, I; Electrophoresis 1999, V20, P653 CAPLUS
(13) Jiang, Q; Eur J Hum Genet 1998, V6, P12 CAPLUS
(14) Jones, V; Anal Chem 1998, V70, P1233 CAPLUS
(15) Joos, T; Electrophoresis 2000, V21, P2641 CAPLUS
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(21) Mendoza, L; Biotechniques 1999, V27, P778 CAPLUS
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(27) Sanders, G; Trends Anal Chem 2000, V19, P364 CAPLUS
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(30) Walter, G; Curr Opin Microbiol 2000, V3, P298 CAPLUS

ANSWER 27 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2002:787438 CAPLUS
DN 138:37532
ED Entered STN: 16 Oct 2002
TI Antibody arrays: an embryonic but rapidly growing technology
AU Lal, Sean P.; Christopherson, Richard I.; dos Remedios, Cristobal G.
CS Institute for Biomedical Research, University of Sydney, Sydney, 2006, Australia
SO Drug Discovery Today (2002), 7(18, Suppl.), S143-S149
CODEN: DDTOFS; ISSN: 1359-6446
PB Elsevier Science Ltd.
DT Journal; General Review
LA English
CC 15-0 (Immunochemistry)
Section cross-reference(s): 9
AB A review. Protein arrays are now an attractive proposition as they can measure a diverse range of protein interactions not possible with traditional DNA arrays. Antibody arrays are a specific subset of this technol. Originally conceived as multi-analyte detectors, antibody arrays are now used in a wide variety of applications. For instance, the potential of this technol. to diagnose human diseases, such as leukemia, breast cancer and, potentially, heart failure, has stimulated much interest. Furthermore, identification of new protein targets in particular disease states will prove to be an invaluable tool in drug discovery and development. Patient prognosis and treatment are also potential applications of the technol. Antibody arrays have proved to be dynamic in response to these broad range of possibilities. This review examines variations in antibody array design and discusses current and potential applications of this novel and interesting technol.
ST review antibody microarray protein
IT Protein microarray technology
(design and applications of antibody arrays)
IT Antibodies and Immunoglobulins
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(design and applications of antibody arrays)
RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
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ANSWER 23 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2003:928473 CAPLUS
DN 140:406306
ED Entered STN: 28 Nov 2003
TI Protein microarrays: A literature survey
AU Kricka, Larry J.; Joos, Thomas; Fortina, Paolo
CS Department of Pathology and Laboratory Medicine, 7.103 Founders Pavilion, Medical Center, University of Pennsylvania, Philadelphia, PA, 19104, USA
SO Clinical Chemistry (Washington, DC, United States) (2003), 49(12), 2109
CODEN: CLCHAU; ISSN: 0009-9147
PB American Association for Clinical Chemistry
DT Journal
LA English
CC 20-5 (History, Education, and Documentation)
AB The Working Group has now completed a survey on the protein microarray literature. The current survey covers the protein, peptide, and antibody, microarray literature up to the middle of 2003. The literature survey has been divided into four sections: (1) General (books, reviews, editorials); (2) Fabrication (array construction and detection methodologies); (3) Applications (protein identification, and quantification, array-based proteomics, protein interactions); and (4) Patents (only US patents listed currently).
ST protein microarray literature
IT Databases
Information systems
Internet
Literature
Protein microarray technology
(protein microarrays: a literature survey)
IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(protein microarrays: a literature survey)
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Kricka, L; Clin Chem 2001, V47, P1479 CAPLUS
(2) Kricka, L; Clin Chem 2002, V48, P1620 CAPLUS
(3) Kricka, L; Clin Chem 2002, V48, P662 CAPLUS

ANSWER 23 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2003:928473 CAPLUS
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TI Protein microarrays: A literature survey
AU Kricka, Larry J.; Joos, Thomas; Fortina, Paolo
CS Department of Pathology and Laboratory Medicine, 7.103 Founders Pavilion, Medical Center, University of Pennsylvania, Philadelphia, PA, 19104, USA
SO Clinical Chemistry (Washington, DC, United States) (2003), 49(12), 2109
CODEN: CLCHAU; ISSN: 0009-9147
PB American Association for Clinical Chemistry
DT Journal
LA English
CC 20-5 (History, Education, and Documentation)
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ST protein microarray literature
IT Databases
Information systems
Internet
Literature
Protein microarray technology
(protein microarrays: a literature survey)
IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(protein microarrays: a literature survey)
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Kricka, L; Clin Chem 2001, V47, P1479 CAPLUS
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(3) Kricka, L; Clin Chem 2002, V48, P662 CAPLUS

ANSWER 21 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:375171 CAPLUS
DN 141:309761
ED Entered STN: 10 May 2004
TI Multiplexed protein analysis using spotted antibody microarrays
AU Haab, Brian B.; Zhou, Heping
CS Van Andel Research Institute, Grand Rapids, MI, USA
SO Methods in Molecular Biology (Totowa, NJ, United States) (2004), 264(Protein Arrays), 33-45
CODEN: MMBIED; ISSN: 1064-3745
PB Humana Press Inc.
DT Journal; General Review
LA English
CC 9-0 (Biochemical Methods)
AB A review. This chapter describes methods for the production and use of antibody microarrays. The methods are divided into (a) antibody handling and microarray production, (b) sample preparation, and (c) microarray use. Two types of detection methods are described: direct labeling and a fluorescence-linked immunosorbent assay (FLISA). In the direct labeling method, all proteins in a complex mixture are labeled with either a fluorophore or a hapten that allows subsequent detection. In FLISA detection, a capture antibody on the microarray captures the unlabeled protein target, which is detected by a detection antibody and a fluorophore-labeled secondary antibody. Each method has particular optimal uses, which are discussed in the text.
ST review multiplexed protein analysis spotted antibody microarrays fluorescence immunoassay
IT Fluorescence immunoassay
(fluorescence-linked immunosorbent assay, FLISA; multiplexed protein anal. using spotted antibody microarrays)
IT Fluorescent indicators
Sample preparation
(multiplexed protein anal. using spotted antibody microarrays)
IT Proteins
RL: ANT (Analyte); ANST (Analytical study)
(multiplexed protein anal. using spotted antibody microarrays)
IT Antibodies and Immunoglobulins
RL: ANT (Analyte); ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(multiplexed protein anal. using spotted antibody microarrays)
IT Blood analysis
(serum profiling; multiplexed protein anal. using spotted antibody microarrays)
IT Protein microarray technology
(spotted antibody; multiplexed protein anal. using spotted antibody microarrays)
RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
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ANSWER 18 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:951644 CAPLUS
DN 142:293875
ED Entered STN: 10 Nov 2004
TI High-throughput proteomics using antibody microarrays
AU Wingren, Christer; Borrebaeck, Carl A. K.
CS Department of Immunotechnology, Lund University, Lund, Swed.
SO Expert Review of Proteomics (2004), 1(3), 355-364
CODEN: ERPXA3; ISSN: 1478-9450
PB Future Drugs Ltd.
DT Journal; General Review
LA English
CC 9-0 (Biochemical Methods)
Section cross-reference(s): 1, 14
AB A review. Antibody-based microarrays are a novel technol. that hold great promise in proteomics. Microarrays can be printed with thousands of recombinant antibodies carrying the desired specificities, the biol. sample (e.g., an entire proteome) and any specifically bound analytes detected. The microarray patterns that are generated can then be converted into proteomic maps, or mol. fingerprints, revealing the composition of the proteome. Using this tool, global proteome anal. and protein expression profiling will thus provide new opportunities for biomarker discovery, drug target identification and disease diagnostics, as well as providing insights into disease biol. Intense work is currently underway to develop this novel technol. platform into the high-throughput proteomic tool required by the research community.
ST review high throughput proteomic antibody microarray
IT Protein expression profiles
Protein microarray technology
Proteomics
(high-throughput proteomics using antibody microarrays)
IT Proteome
RL: ANT (Analyte); ANST (Analytical study)
(high-throughput proteomics using antibody microarrays)
IT Antibodies and Immunoglobulins
RL: ARG (Analytical reagent use); DEV (Device component use); ANST (Analytical study); USES (Uses)
(high-throughput proteomics using antibody microarrays)
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ANSWER 2 OF 35 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
AN 2005:219591 BIOSIS
DN PREV200510003108
TI Progress in protein and antibody microarray technology.
AU Angenendt, Philipp [Reprint Author]
CS German Canc Res Ctr, Funct Genome Anal, Neuenheimer Feld 580, D-69120 Heidelberg, Germany
p.angenendt@dkfz-heidelberg.de
SO Drug Discovery Today, (APR 1 2005) Vol. 10, No. 7, pp. 503-511.
ISSN: 1359-6446.
DT Article
General Review; (Literature Review)
LA English
ED Entered STN: 10 Jun 2005
Last Updated on STN: 10 Jun 2005
AB The success of genome sequencing projects has led to a shift from the description of single molecules to the characterisation of complex samples. At the same time, there is growing interest not only in studying organisms at the genomic level, but in the characterization of their proteome. Such a task would not be possible without the availability of appropriate technologies. Protein and antibody microarray technologies are, in addition to two-dimensional gel electrophoresis followed by mass spectrometry, two of the most propitious technologies for the screening of complex protein samples. Nevertheless, to succeed, protein and antibody microarrays have to overcome their current limitations. This review aims to introduce these new technologies and highlights their current prospects and limitations.
CC Genetics - General 03502
Genetics - Population genetics 03509
IT Major Concepts
Methods and Techniques; Population Genetics (Population Studies); Molecular Genetics (Biochemistry and Molecular Biophysics)
IT Methods & Equipment
mass spectrometry: laboratory techniques, spectrum analysis techniques; two-dimensional gel electrophoresis: electrophoretic techniques, laboratory techniques; genome sequencing: laboratory techniques, genetic techniques; antibody microarray: laboratory techniques; protein microarray: laboratory techniques